

What is claimed is:

5/28
1. A fluorescent lamp comprising:
a glass tube both ends of which are sealed airtight and
discharge medium filled in the inside;
a fluorescent substance layer formed on the inner wall
surface of said glass tube;
an inner electrode arranged at one end in this glass tube
and given with a potential and
an outer electrode comprising a conductor spirally wound
around said glass tube between its both ends along an axis
of said tube and given with the other potential than that
is given said inner electrode.

2. A fluorescent lamp according to claim 1, wherein
the discharge medium is Xe gas or a mixture of Xe gas and
other rare gas.

3. A fluorescent lamp according to claim 2, wherein
an outer surface of said outer electrode is covered by a
translucent resin film layer jointly with said glass tube,
thereby said outer electrode is fixed to the outer surface
of said glass tube in one united body.

5/28
4. A fluorescent lamp comprising:
a glass tube having a fluorescent substance film formed
on an inner surface and having sealing portions formed at
both ends thereof so that discharge medium is filled inside
the glass tube; a first feeding lead wire penetrating one
of said sealing portions of said glass tube airtight,

an inner electrode connected to an end of said feeding lead wire extended into said glass tube;

a second feeding lead wire one end of which is buried in the other sealing portion of said glass tube, and the other end is lead out of said glass tube; and

an outer electrode composing of a conductor spirally wound around an outer surface of said glass tube along an axis of said tube with an end of the conductor being electrically connected and mechanically fixed to said second feeding lead wire.

5. A fluorescent lamp according to claim 4, wherein said end of the second feeding lead wire buried in the other sealing portion of the glass tube is not exposed to inside of said glass tube.

6. A fluorescent lamp according to claim 5, wherein said end of the conductor composing the outer electrode is wound around the second feeding lead wire.

7. A fluorescent lamp according to claim 6, wherein said end of the conductor composing the outer electrode is wound around the second feeding lead wire in the same direction as the winding direction of the conductor composing the outer electrode on the outer surface of the glass tube.

8. A fluorescent lamp according to claim 7, wherein the outer surface of the glass tube including the outer electrode is covered with a translucent resin film layer

which fixes thereto the outer electrode to form an integral body.

9. A fluorescent lamp according to claim 8, wherein said end of the second feeding lead wire buried in the other sealing portion of the glass tube has an engaging part at its end portion.

543
10. A fluorescent lamp according to claim 8, wherein the discharge medium is xenon-gas or a mixture of xenon-gas and at least other rare gas.

11. A fluorescent lamp comprising:
a glass tube with a sealing portion formed at both ends;
a fluorescent substance film formed on an inner surface of said glass tube;
a discharge medium including rare gas filled in said glass tube;
a first feeding lead wire sealed airtight and penetrating one of said sealing portions of the glass tube;
an inner electrode provided at an end of said first feeding lead wire;
a second feeding lead wire one end of which is buried in the other sealing portion of the glass tube and the other end is lead out from the glass tube;
a locating portion formed on an outer surface of the glass tube; and
an outer electrode that is composed of a conductor and is guided by said locating portion, is spirally wound around